

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

7

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 09/28/2017		2. CONTRACT NO. (If any) EP-W-13-016		6. SHIP TO: a. NAME OF CONSIGNEE HPOD PY1	
3. ORDER NO. 0027		4. REQUISITION/REFERENCE NO. See Schedule			
5. ISSUING OFFICE (Address correspondence to) SRRPOD US Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N. W. Mail Code: 3805R Washington DC 20460				b. STREET ADDRESS One Potomac Yard 2777 S Crystal Drive	
				c. CITY Arlington	e. ZIP CODE 22202-3553
7. TO: Thomas Heim				f. SHIP VIA	
a. NAME OF CONTRACTOR ENVIRONMENTAL MANAGEMENT SUPPORT INC				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY REFERENCE YOUR: Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
c. STREET ADDRESS 8601 GEORGIA AVE STE 500 3015895318				Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
d. CITY SILVER SPRING		e. STATE MD	f. ZIP CODE 209103439		
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE TIFSD	
11. BUSINESS CLASSIFICATION (Check appropriate box(es))					
<input type="checkbox"/> a. SMALL <input type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					
13. PLACE OF				12. F.O.B. POINT Destination	
a. INSPECTION Destination		b. ACCEPTANCE Destination		14. GOVERNMENT B/L NO.	
				15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) Multiple	
				16. DISCOUNT TERMS	

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 106741598 TASK ORDER TITLE: CLEAN CLOSURE ASSESSMENT OF OPEN BURNING/OPEN DENOTATIONS (OB/OD) UNITS/SITES. Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$150,000.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts						\$370,053.00
c. CITY Durham		d. STATE NC	e. ZIP CODE 27711				17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY (Signature)

09/28/2017

Mark Heare

ELECTRONIC SIGNATURE

23. NAME (Typed)
Mark Heare
TITLE: CONTRACTING/ORDERING OFFICER

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO
2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 09/28/2017	CONTRACT NO. EP-W-13-016	ORDER NO. 0027
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ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	<p>This is a Time-and-Material (T&M) task order that is incrementally funded in the amount of \$150,000.00. The task order ceiling price is \$370,052.00 which the vendor is not authorized to exceed at its own risk.</p> <p>TOCOR: GAINES JEFFERY Admin Office: SRRPOD US Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N. W. Mail Code: 3805R Washington DC 20460 Period of Performance: 09/28/2017 to 09/27/2018</p> <p>THE CONTRACTOR SHALL PERFORM THE TASK AND/OR DELIVERABLES LISTED BELOW IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK.</p> <p>Requisition No: PR-OLEM-17-00638</p> <p>Delivery: 09/02/2018 Accounting Info: 17-18-B-31P-302DA1-2585-1731PDP027-001 BFY: 17 EFY: 18 Fund: B Budget Org: 31P Program (PRC): 302DA1 Budget (BOC): 2585 DCN - Line ID: 1731PDP027-001 Funding Flag: Complete Funded: \$149,999.00</p>				149,999.00	
0002	<p>Clean Closure Assessment of Open Burning/Open Detonation (OB/OD) Units/Sites. Continued ...</p>				1.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$150,000.00

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO
3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER
09/28/2017

CONTRACT NO.
EP-W-13-016

ORDER NO.
0027

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Requisition No: PR-OLEM-17-00416 Delivery: 05/31/2017 Accounting Info: 17-18-B-31P-302DA1-2585-1731PDP019-001 BFY: 17 EFY: 18 Fund: B Budget Org: 31P Program (PRC): 302DA1 Budget (BOC): 2585 DCN - Line ID: 1731PDP019-001 Funding Flag: Complete Funded: \$1.00					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

OSRTI Technical Assessment, Support, Outreach, and Training

EP-W-13-016

Task Order 23 modification/amendment

TITLE: Modification/amendment to Task Order 23 to add a **Task 3**, “Clean Closure Assessment of Open Burning/Open Detonation (OB/OD) Units/Sites.”

RFO Number: #####

TASK 3 STATEMENT OF WORK

Clean Closure Assessment of Open Burning/Open Detonation (OB/OD) Units/Sites. The work under this task is a logical outgrowth of work conducted under Task 2, assessing contamination at OB/OD.

1. Objectives:

- 1) To identify procedures and techniques to assess, clean up, and close open burning and open detonation units/sites;
- 2) To identify criteria (metrics) used to determine clean closure; and
- 3) To document the success of these procedures and metrics to assure clean closure.

The results will be used to evaluate, develop, and document procedures, techniques, and criteria to clean up and close OB/OD units/sites in a standardized manner.

2. **Need:** There currently is no national guidance on procedures to assess, monitor and clean up OB/OD sites, nor metrics to achieve clean closure of OB/OD units. This effort is to assist EPA in identifying and evaluating procedures and metrics that have been used, and to further document the cost of closure. EPA may then use this information to develop future policy related to OB/OD.

3. Background:

OB/OD units under RCRA are considered “treatment,” not disposal units, and are therefore required to clean close at closure. Many OB/OD units in the U.S. (including many DOD and some DOE units) have ceased operations and are therefore required to clean close. Many of these are being cleaned up under the BRAC and FUDS programs, others under the RCRA and/or Superfund programs. Under the FY17 National Defense Authorization Act, additional operating OB/OD sites will be encouraged to close, where viable options exist.

The RCRA regulations require clean closure when OB/OD units cease operations. Clean closure by definition means removal of all remaining waste, decontaminating all equipment (including pans, pads, and liners), and removal and cleanup of all remaining contaminants (including particulate fallout and kickout (fragments, unexploded ordnance, and energetic chunks) above threshold action levels.

EPA is documenting the extent of contamination resulting from OB/OD and the cost of clean-up/closure of these units/sites. This research has evaluated over 100 RCRA and CERCLA OB/OD units/sites. Results to date indicate extensive and problematic soil and ground water contamination and extraordinarily high costs of cleanup. Of significance and therefore problematic is the extent of the contamination in terms of area and depth, thus creating problems in measuring and determining the extent of contamination, and remediating the area/depth for the unit, fallout area, kick-out area, and ground water plume). The worst soil contamination tends to be close in and further out (typically over 1,000 feet and up to 4,000 feet), and at depths greater than 14 feet for OD operations. This project is to examine the procedures used to investigate and remediate, and what these numbers mean in terms of future clean-up.

4. Approach:

EPA shall provide the contractor with a list and status of all RCRA and CERCLA (Superfund) OB/OD facilities that have ceased operations and have achieved clean closure or sought to clean close. Some of these will be in the process of clean closing, some have been designated as clean closed, some will be in corrective action, and some will be in post-closure care because they have been unable to achieve clean closure. EPA will select the facilities from this list for the contractor to seek additional information to assess.

The contractor will gather information, from records, from regulators/on-scene coordinators, and owner/operators, regarding the clean-up and closure of a select number (at least 25) of the approximately 180 RCRA-regulated and CERCLA/Superfund OB/OD units/sites that have ceased operations and achieved or attempted clean-up and clean closure. The information to be gathered will document how the unit was defined, evaluated, and cleaned up.

5. Tasks:

To gather and assess the information identified and discussed in Section 6.

- 5.1 Conduct a literature search (including EPA and DOD documents, such as closure and corrective action/remediation plans and reports, for examples, see citations in appendix),
- 5.2 Contact RCRA regulators and CERCLA on-scene coordinators as appropriate, and in limited cases, owners/operators of OB/OD units,
- 5.3 Tabulate information from the above tasks,
- 5.4 Develop a report outline, draft, and final report.

6. Information to be gathered and assessed:

- 6.1 Document historical operations at the unit, e.g., types and amounts of wastes, frequency and years of operations;
- 6.2 Procedures and techniques used to remove the wastes and components of the unit (e.g., any platforms, pans, pads, and liners), and disposition;
- 6.3 Procedures and techniques used to identify the 3-dimensional extent and character of the fallout (particulate, products of incomplete combustion), kick-out (UXO, fragments, explosive chunks), and contamination (including heavy metals, RDX, HMX, TNT, perchlorate and other explosives) in the soil, surface water, and ground water. Such procedures and techniques include:
 - Visual and wind records to inform where fallout and debris/kick-out went (areas that should be evaluated);
 - Geophysical efforts to identify anomalies and the extent and depth of UXO and metallic fragments/debris;
 - Sampling methods used to identify the extent and depth of contamination in the unit and surrounding soils, including:
 - Visual, discrete, composite, and incremental soil sampling methods,
 - Grid, random, spokes, meandering way, line trenching, and other unit/soil sampling procedures;
 - Ground water sampling procedures.
- 6.4 Clean-up procedures and techniques used, and criteria/metrics used to determine clean closure was achieved, including:
 - Intrusive anomaly resolutions;
 - Unit and contaminated soil excavation/trenching and sieving and other physical or chemical/biological treatment, and confirmation sampling, i.e., how it was determined the extent of the unit/contamination was reached (in 3 dimensions);
 - Ground water counter-pumping and purging (pump and treat), and other methods used to clean up contaminated ground water.
- 6.5 Data recorded and metrics used to evaluate finds, progress, and successes.

6.6 Clean-up costs.

6.7 Closure to lesser than clean closure and basis (e.g., habitat management, recreational, industrial uses, with LUCs/IC in place; closure like a landfill).

7. Schedule:

Task/subtask number	Deliverable	Due Date
Task 5.1	Draft tabulation – procedures identified in literature, and site-specific data and information collected through literature search	6 weeks after receipt of list of sites from TOCOR
Task 5.2	Revised tabulation – updated data and information collected via facility and state contacts	12 weeks after receipt of EPA comments on Task 5.1
Task 5.4(a)	Draft outline of report	2 weeks after receipt of EPA comments on Task 5.2
Task 5.4(b)	Draft of report	6 weeks after receipt of TOCOR comments on Task 5.4(a)
Task 5.4(c)	Revised report	4 weeks after receipt of TOCOR comments on Task 5.4(b)

Appendices

1. Acronyms:

BRAC – Base Realignment and Closure

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

DOD – Department of Defense

DOE – Department of Energy

EOD – Explosives Ordnance Disposal

EPA – U.S. Environmental Protection Agency

FUDs – Formerly Used Defense Sites

LUCs/IC – Land Use Controls/Institutional Controls

MEC – Munitions and Explosives of Concern

OB/OD – Open Burning and Open Detonation

RCRA – Resource Conservation and Recovery Act

UXO – Unexploded Ordnance

2. Literature Citations:

- EPA, Handbook: Approaches for the Remediation of Federal Facility Sites Contaminated with Explosives or Radioactive Wastes, EPA/625/R-93/013, September 1993.
- EPA, Federal Facilities Forum Issue Paper, Field Sampling and Selecting On-Site Analytical Methods for Explosives in Soil, 1996.
- https://www.epa.gov/sites/production/files/2015-06/documents/explosives_in_soil_0.pdf
- EPA, Federal Facilities Forum Issue Paper, Field Sampling and Selecting On-Site Analytical Methods for Explosives in Water, 1999.
- https://www.epa.gov/sites/production/files/2015-06/documents/explosives_in_water.pdf
- SERDP/ESTCP/ESTCP Survey of Munitions Response Technologies, June 2006.
- ITRC, Incremental Sampling Methodology, Technical and Regulatory Guidance, September 2012.

- EPA, Federal Facilities Forum Issue Paper, Site Characterizations for Munitions Constituents, 2012.
- https://www.epa.gov/sites/production/files/documents/site_characterization_for_munitions_constituents.pdf

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES	
						1 3	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00001		See Block 16C		PR-SRRPOD-18-00001			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
SRRPOD							
US Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N. W. Mail Code: 3805R Washington DC 20460							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x) 9A. AMENDMENT OF SOLICITATION NO.			
ENVIRONMENTAL MANAGEMENT SUPPORT INC							
Attn: Thomas Heim				9B. DATED (SEE ITEM 11)			
8601 GEORGIA AVE STE 500							
3015895318							
SILVER SPRING MD 209103439				x 10A. MODIFICATION OF CONTRACT/ORDER NO.			
				EP-W-13-016			
				0027			
				10B. DATED (SEE ITEM 13)			
				09/28/2017			
CODE 106741598		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)				Net Decrease:		-\$150,000.00	
See Schedule							
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
	D. OTHER (Specify type of modification and authority)						
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not. <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
DUNS Number: 106741598							
TASK ORDER TITLE: CLEAN CLOSURE ASSESSMENT OF OPEN BURNING/OPEN DENOTATIONS (OB/OD)							
UNITS/SITES.							
TOCOR: GAINES JEFFERY The purpose of this modification is to de-obligate funding in the amount of \$ 150,000.00 from Task Order #0027 to be re-obligate to Task Order #0023. This will hereby close out Task Order #0027 on Contract EP-w-13-016. The contractor shall not incur costs beyond the ceiling amount without prior written approval from the Contracting Officer. All other terms Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Mark Heare			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		ELECTRONIC SIGNATURE 09/28/2017	

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED EP-W-13-016/0027/P00001	PAGE	OF
		2	3

NAME OF OFFEROR OR CONTRACTOR
ENVIRONMENTAL MANAGEMENT SUPPORT INC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>and conditions remain unchanged and in full force and effect.</p> <p>LIST OF CHANGES: Reason for Modification : Other Administrative Action Total Amount for this Modification: -\$1.00 New Total Amount for this Version: \$370,052.00 New Total Amount for this Award: \$370,052.00 Obligated Amount for this Modification: -\$150,000.00 New Total Obligated Amount for this Award: \$0.00 Incremental Funded Amount changed: from \$149,999.00 to \$0.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1 Obligated Amount for this modification: -\$149,999.00 Incremental Funded Amount changed from \$149,999.00 to \$0.00</p> <p>CHANGES FOR ACCOUNTING CODE: 17-18-B-31P-302DA1-2585-1731PDP027-001 Amount changed from \$370,052.00 to \$0.00 Percent changed from 100 to 0</p> <p>CHANGES FOR LINE ITEM NUMBER: 2 Total Amount changed from \$1.00 to \$0.00 Obligated Amount for this modification: -\$1.00</p> <p>CHANGES FOR DELIVERY LOCATION: HPOD PY1 Amount changed from \$1.00 to \$0.00</p> <p>CHANGES FOR ACCOUNTING CODE: 17-18-B-31P-302DA1-2585-1731PDP019-001 Amount changed from \$1.00 to \$0.00 Percent changed from 100 to 0</p> <p>Delivery Location Code: HPOD PY1 HPOD PY1 One Potomac Yard 2777 S Crystal Drive Arlington VA 22202-3553 USA</p> <p>Continued ...</p>				

NAME OF OFFEROR OR CONTRACTOR
 ENVIRONMENTAL MANAGEMENT SUPPORT INC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 FOB: Destination Period of Performance: 09/28/2017 to 09/27/2018				